Fig. 1

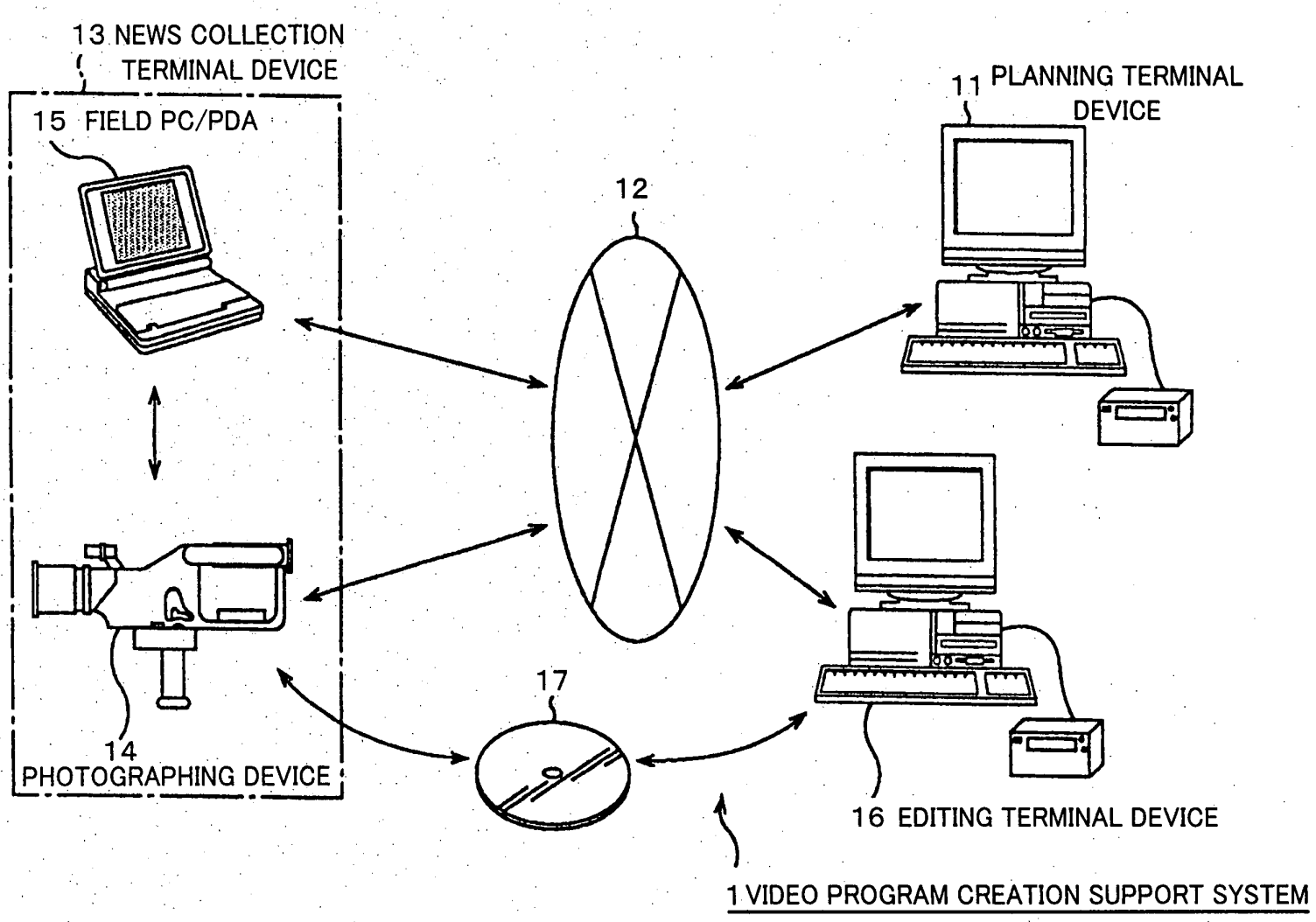

13 NEWS COLLECTION TERMINAL DEVICE
15 FIELD PC/PDA
14 PHOTOGRAPHING DEVICE
12
11 PLANNING TERMINAL DEVICE
17
16 EDITING TERMINAL DEVICE
1 VIDEO PROGRAM CREATION SUPPORT SYSTEM

Fig. 2

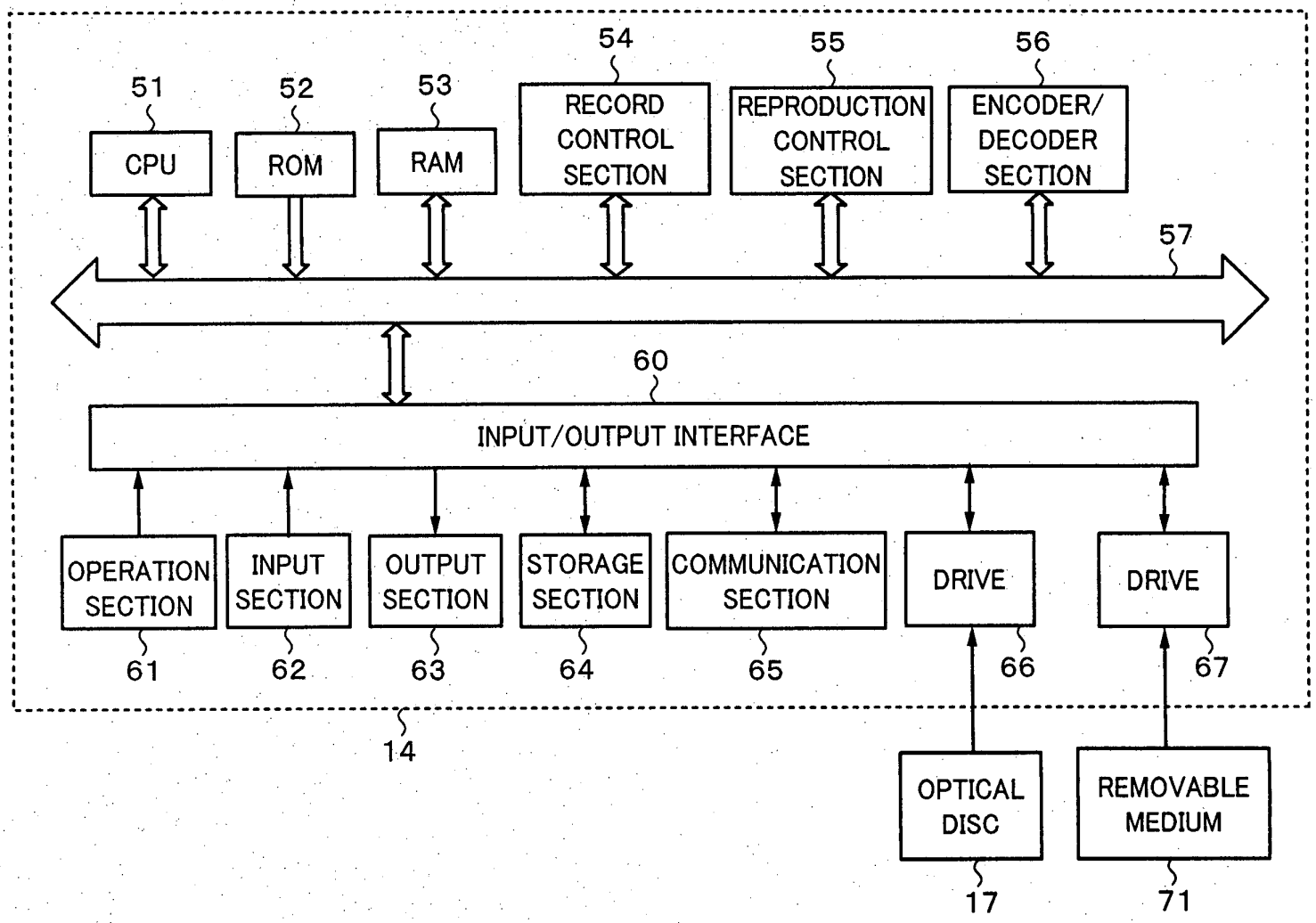

51
CPU
52
ROM
53
RAM
54
RECORD CONTROL SECTION
55
REPRODUCTION CONTROL SECTION
56
ENCODER/ DECODER SECTION
57
60
INPUT/OUTPUT INTERFACE
OPERATION SECTION
61
INPUT SECTION
62
OUTPUT SECTION
63
STORAGE SECTION
64
COMMUNICATION SECTION
65
DRIVE
66
DRIVE
67
14
OPTICAL DISC
17
REMOVABLE MEDIUM
71

Fig. 3

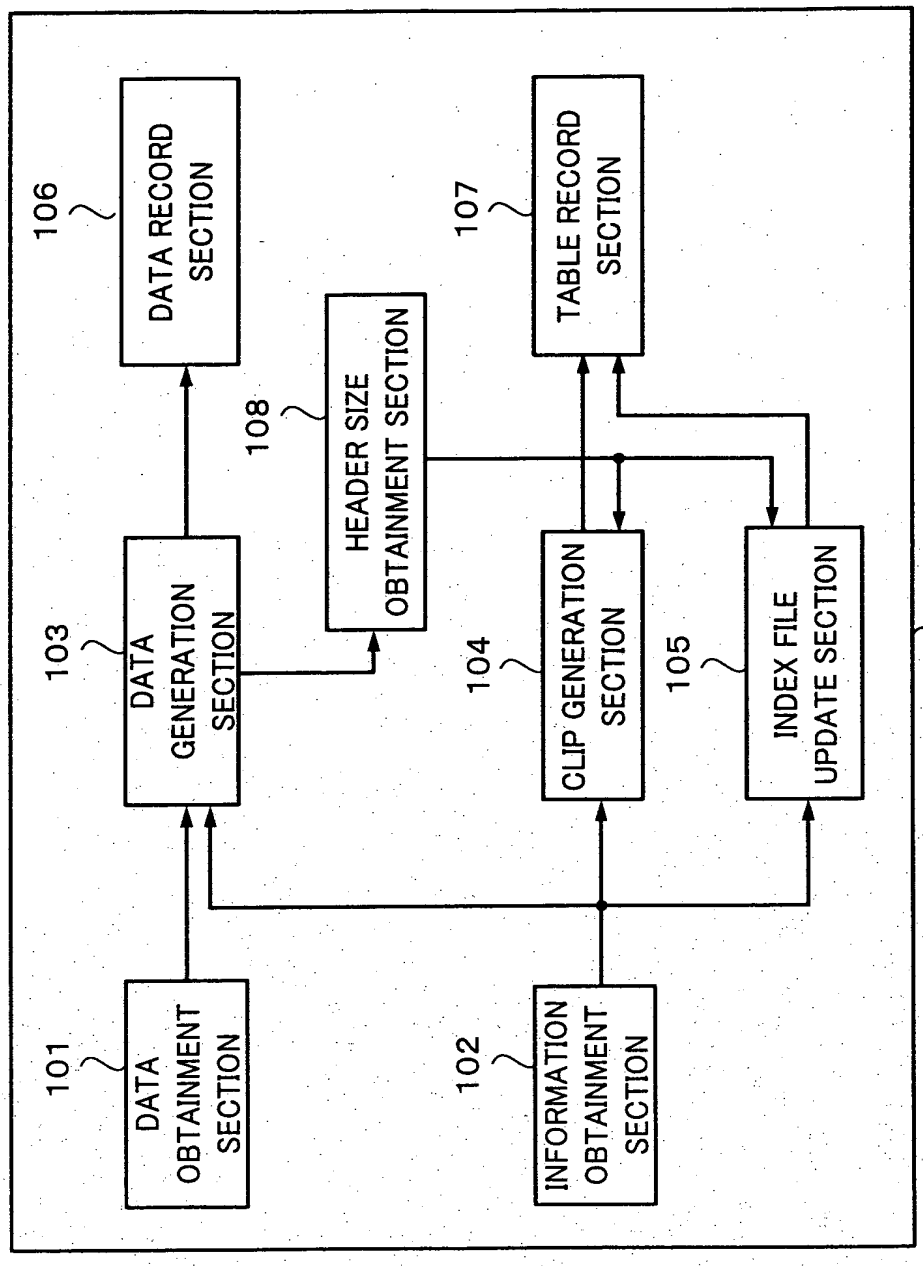

DATA OBTAINMENT SECTION
101
INFORMATION OBTAINMENT SECTION
102
DATA GENERATION SECTION
103
CLIP GENERATION SECTION
104
INDEX FILE UPDATE SECTION
105
DATA RECORD SECTION
106
TABLE RECORD SECTION
107
HEADER SIZE OBTAINMENT SECTION
108
54

Fig. 4

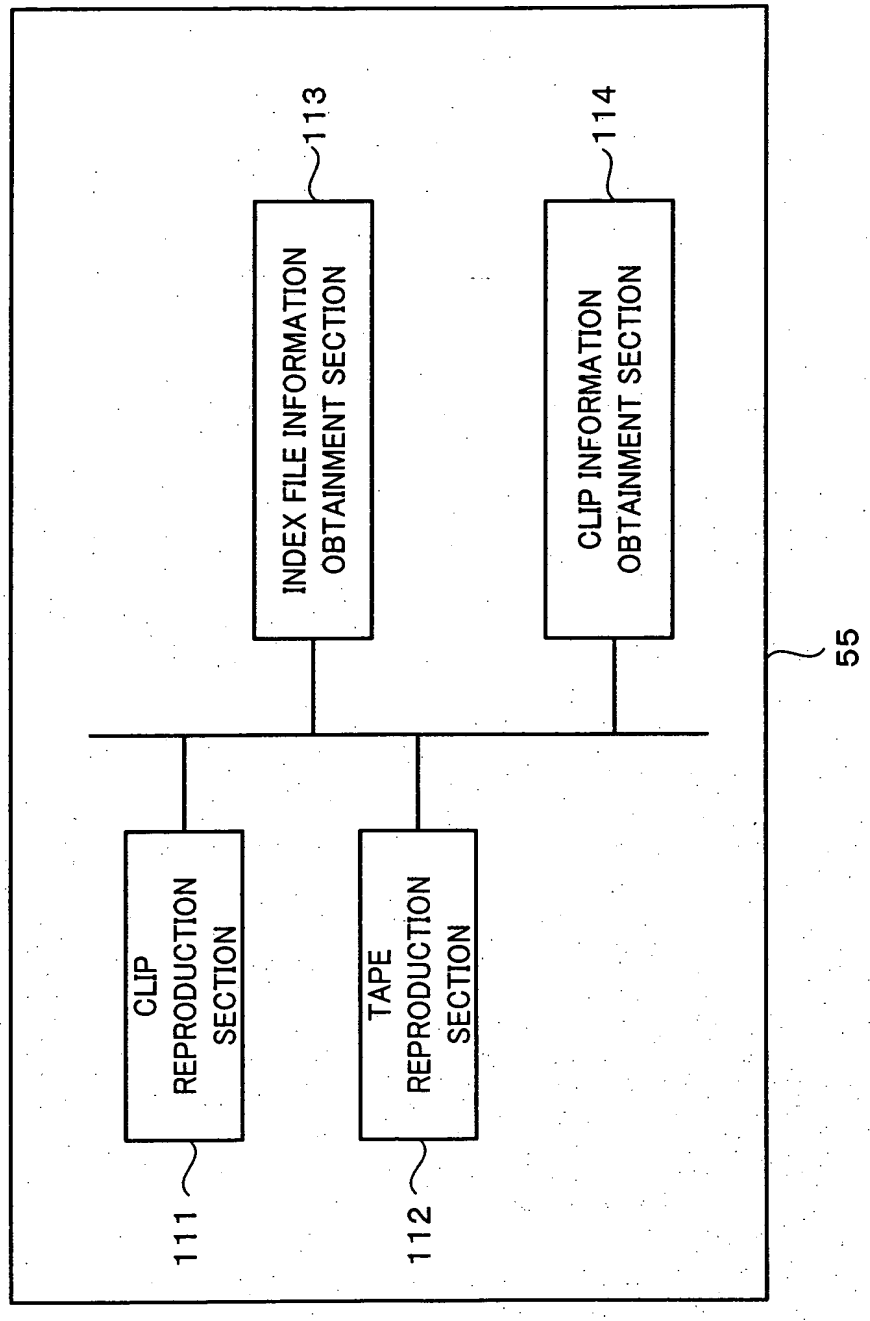

55
CLIP REPRODUCTION SECTION
111
TAPE REPRODUCTION SECTION
112
INDEX FILE INFORMATION OBTAINMENT SECTION
113
CLIP INFORMATION OBTAINMENT SECTION
114

Fig. 5

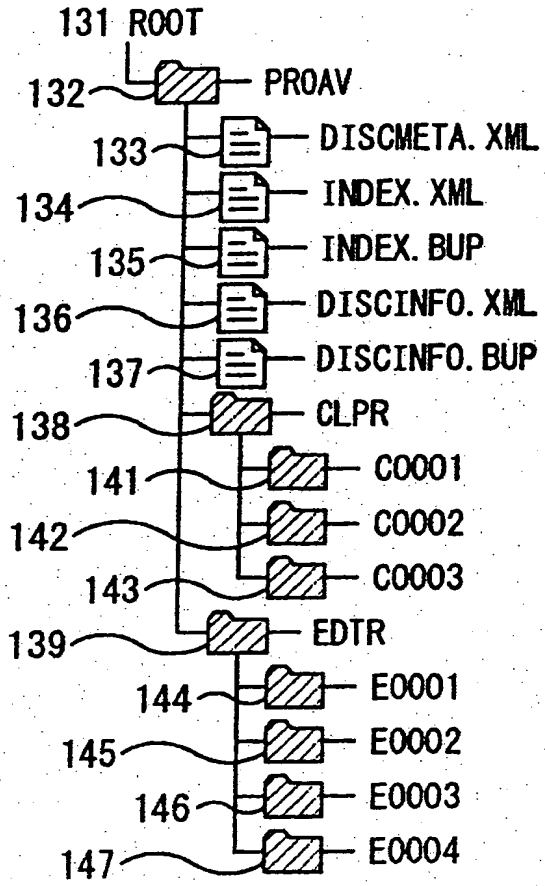

131 ROOT
132
PROAV
133
DISCMETA. XML
134
INDEX. XML
135
INDEX. BUP
136
DISCINFO. XML
137
DISCINFO. BUP
138
CLPR
141
C0001
142
C0002
143
C0003
139
EDTR
144
E0001
145
E0002
146
E0003
147
E0004

Fig. 6

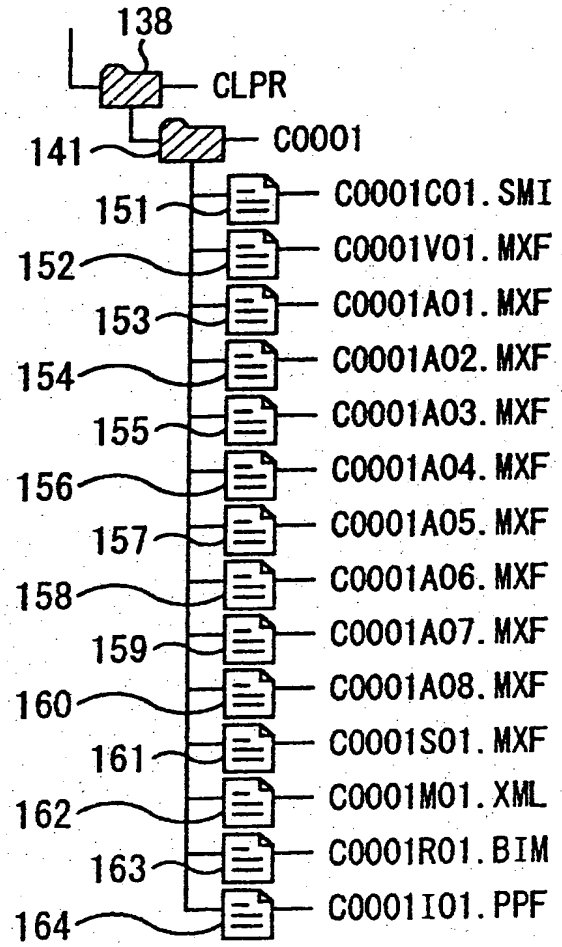

138
CLPR
141
C0001
151
C0001C01.SMI
152
C0001V01.MXF
153
C0001A01.MXF
154
C0001A02.MXF
155
C0001A03.MXF
156
C0001A04.MXF
157
C0001A05.MXF
158
C0001A06.MXF
159
C0001A07.MXF
160
C0001A08.MXF
161
C0001S01.MXF
162
C0001M01.XML
163
C0001R01.BIM
164
C0001I01.PPF

Fig. 7

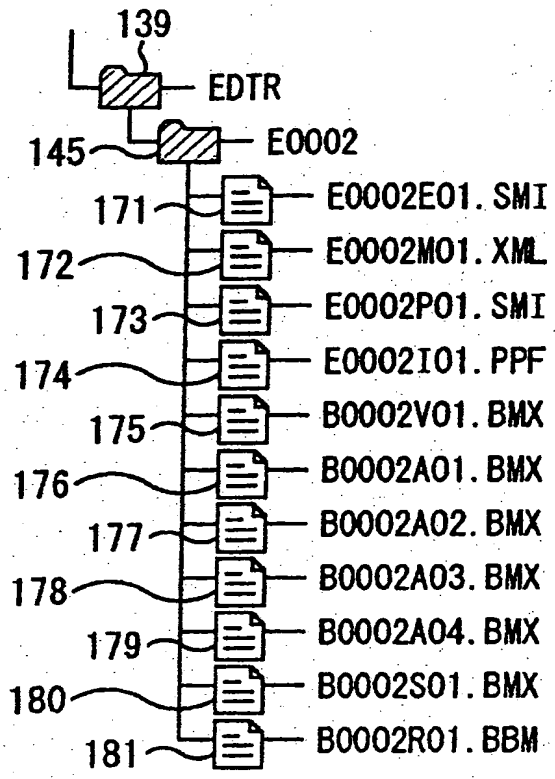

139
EDTR
145
E0002
171
E0002E01.SMI
172
E0002M01.XML
173
E0002P01.SMI
174
E0002I01.PPF
175
B0002V01.BMX
176
B0002A01.BMX
177
B0002A02.BMX
178
B0002A03.BMX
179
B0002A04.BMX
180
B0002S01.BMX
181
B0002R01.BBM

Fig. 8

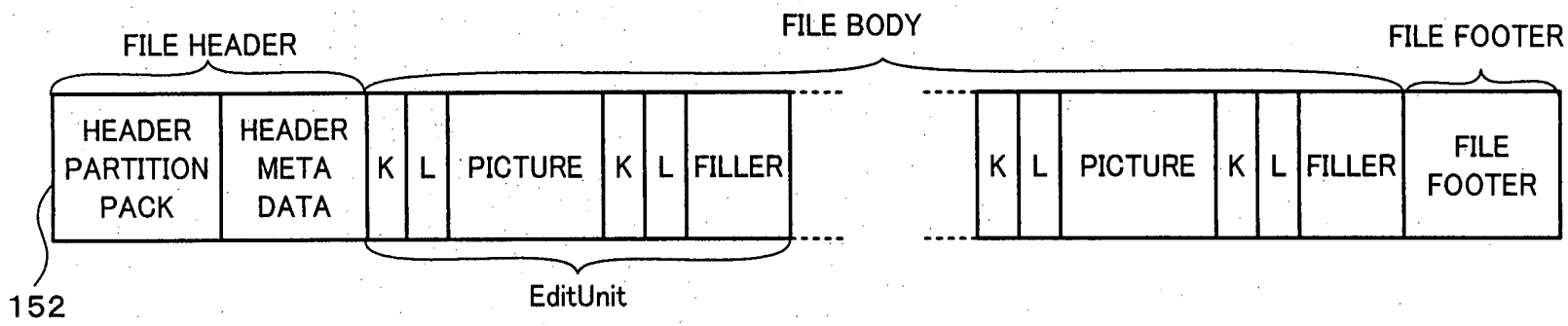

FILE HEADER
FILE BODY
FILE FOOTER
HEADER PARTITION PACK
HEADER META DATA
K
L
PICTURE
K
L
FILLER
K
L
PICTURE
K
L
FILLER
FILE FOOTER
EditUnit
152

Fig. 9

```
1:  <?xml version="1.0" encoding="UTF-8" ?>
2:  <indexFile xmlns="urn:schemas-professionalDisc:index:2003"
3:    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4:    xsi:noNamespaceSchemaLocation="index.xsd">
5:   + <clipTable path="/PROAV/CLPR/">
6:   + <editlistTable path="/PROAV/EDTR/">
7:  </indexFile>
```

Fig. 10

```
1:  <clipTable path="/PROAV/CLPR/">
2:   + <clip id="C0001"
3:     umid="0123456789ABCDEF0123456789ABCDEF0123456789AA"
4:      file="C0001C01.SMI" fps="59.94i" dur="12001" ch="4"
5:     aspectRatio="4:3">
6:   + <clip id="C0002"
7:     umid="0123456789ABCDEF0123456789ABCDEF0123456789AB"
8:      file="C0002C01.SMI" fps="59.94i" dur="4000" ch="4"
9:     aspectRatio="4:3">
10:  + <clip id="C0003"
11:    umid="0123456789ABCDEF0123456789ABCDEF0123456789AC"
12:     file="C0003C01.SMI" fps="59.94i" dur="100000" ch="4"
13:    aspectRatio="4:3">
14:  + <clip id="C0004"
15:    umid="0123456789ABCDEF0123456789ABCDEF0123456789AD"
16:     file="C0004C01.SMI" fps="59.94i" dur="12001" ch="4"
17:    aspectRatio="16:9">
18: </clipTable>
```

Fig. 11

```
1:  <clip id="C0001" umid="0123456789ABCDEF0123456789ABCDEF0123456789AA"
2:    file="C0001C01.SMI" fps="59.94i" dur="12001" ch="4" aspectRatio="4:3">
3:    <video umid="0123456789ABCDEF0123456789ABCDEF0123456789A1"
4:       file="C0001V01.MXF" type="DV25_411P" header="65536"/>
5:    <audio umid="0123456789ABCDEF0123456789ABCDEF0123456789A2"
6:       file="C0001A01.MXF" type="LPCM16" header="65536" cast="CH1"/>
7:    <audio umid="0123456789ABCDEF0123456789ABCDEF0123456789A3"
8:       file="C0001A02.MXF" type="LPCM16" header="65536" cast="CH2"/>
9:    <audio umid="0123456789ABCDEF0123456789ABCDEF0123456789A4"
10:      file="C0001A03.MXF" type="LPCM16" header="65536" cast="CH3"/>
11:   <audio umid="0123456789ABCDEF0123456789ABCDEF0123456789A5"
12:      file="C0001A04.MXF" type="LPCM16" header="65536" cast="CH4"/>
13:   <subStream umid="0123456789ABCDEF0123456789ABCDEF0123456789A6"
14:      file="C0001S01.MXF" type="PD-SubStream" header="65536"/>
15:   <meta file="C0001M01.XML" type="PD-Meta"/>
16:   <rtmeta file="C0001R01.BIM" type="std" header="65536"/>
17: </clip>
```

Fig. 12

```
1:  <editlistTable path="/PROAV/EDTR/">
2:   + <editlist id="E0001"
3:    umid="0123456789ABCDEF0123456789ABCDEF0123456789BB"
4:      file="E0001E01.SMI" dur="500" fps="59.94i" ch="4"
5:    aspectRatio="4:3">
6:   + <editlist id="E0002"
7:    umid="0123456789ABCDEF0123456789ABCDEF0123456789BC"
8:      file="E0002E01.SMI" dur="500" fps="59.94i" ch="4"
9:    aspectRatio="4:3">
10:  + <editlist id="E0003"
11:   umid="0123456789ABCDEF0123456789ABCDEF0123456789BD"
12:     file="E0003E01.SMI" dur="500" fps="59.94i" ch="4"
13:   aspectRatio="4:3">
14:  + <editlist id="E0004"
15:   umid="0123456789ABCDEF0123456789ABCDEF0123456789BE"
16:     file="E0003E01.SMI" dur="500" fps="59.94i" ch="4"
17:   aspectRatio="16:9">
18: </editlistTable>
```

Fig. 13

```
1:  <editlist id="E0001"
2:    umid="0123456789ABCDEF0123456789ABCDEF0123456789B1"
3:    file="E0001E01.SMI" dur="500" fps="59.94i" ch="4"
4:    aspectRatio="4:3">
5:    <playlist file="E0001P01.SMI"/>
6:    <meta file="E0001M01.XML" type="PD-Meta"/>
7:  </editlist>
```

Fig. 14

```
1:        <body>
2:            <par>
3:                <switch>
4:                    <!-- main stream -->
5:                    <par systemComponent="IMX50">
6:                        <video
7:  src="urn:smpte:umid:060A2B340101010501010D1213000000123456789ABCDEF0123456789ABCDE
8:  F" type="IMX50" header"65536"/>
9:                        <audio
10: src="urn:smpte:umid:060A2B340101010501010D1213000000123456789ABCDEF0123456789ABCDEF
11: 0" type="LPCM16" header"65536" trackDst="CH1"/>
12:                       <audio
13: src="urn:smpte:umid:060A2B340101010501010D1213000000023456789ABCDEF0123456789ABCDEF0
14: 1" type="LPCM16" header"65536" trackDst="CH2"/>
15:                       <audio
16: src="urn:smpte:umid:060A2B340101010501010D1213000000003456789ABCDEF0123456789ABCDEF01
17: 2" type="LPCM16" header"65536" trackDst="CH3"/>
18:                       <audio
19: src="urn:smpte:umid:060A2B340101010501010D1213000000456789ABCDEF0123456789ABCDEF012
20: 3" type="LPCM16" header"65536" trackDst="CH4"/>
```

Fig. 15

```
21:                                <audio
22:  src="urn:smpte:umid:060A2B340101010501010D12130000056789ABCDEF0123456789ABCDEF0123
23:  4" type="LPCM16" header"65536" trackDst="CH5"/>
24:                                <audio
25:  src="urn:smpte:umid:060A2B340101010501010D12130000006789ABCDEF0123456789ABCDEF01234
26:  5" type="LPCM16" header"65536" trackDst="CH6"/>
27:                                <audio
28:  src="urn:smpte:umid:060A2B340101010501010D12130000000789ABCDEF0123456789ABCDEF012345
29:  6" type="LPCM16" header"65536" trackDst="CH7"/>
30:                                <audio
31:  src="urn:smpte:umid:060A2B340101010501010D12130000000089ABCDEF0123456789ABCDEF0123456
32:  7" type="LPCM16" header"65536" trackDst="CH8"/>
33:                            </par>
34:                            <!-- sub stream -->
35:                            <ref
36:  src="urn:smpte:umid:060A2B340101010501010D12130000009ABCDEF0123456789ABCDEF01234567
37:  8" type="SubStream" header"65536" systemComponent="PD-SubStream"/>
38:                        </switch>
39:                        <!-- realtime meta -->
40:                        <metastream src="C0001R01.BIM" type="std" header"65536"/>
41:                    </par>
42:                </body>
```

Fig. 16

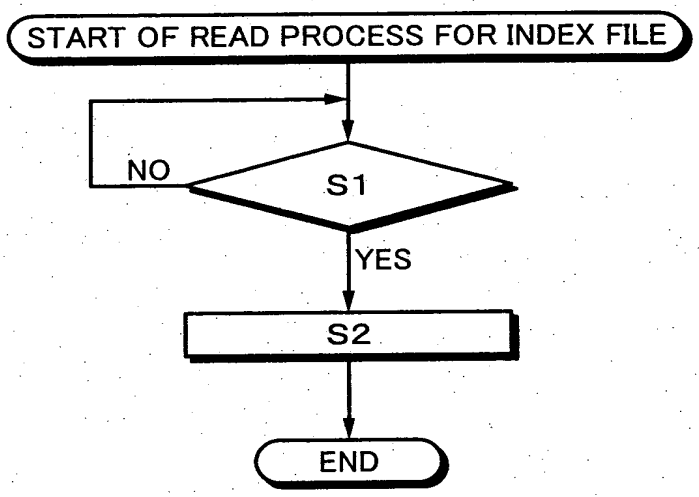


Fig. 17

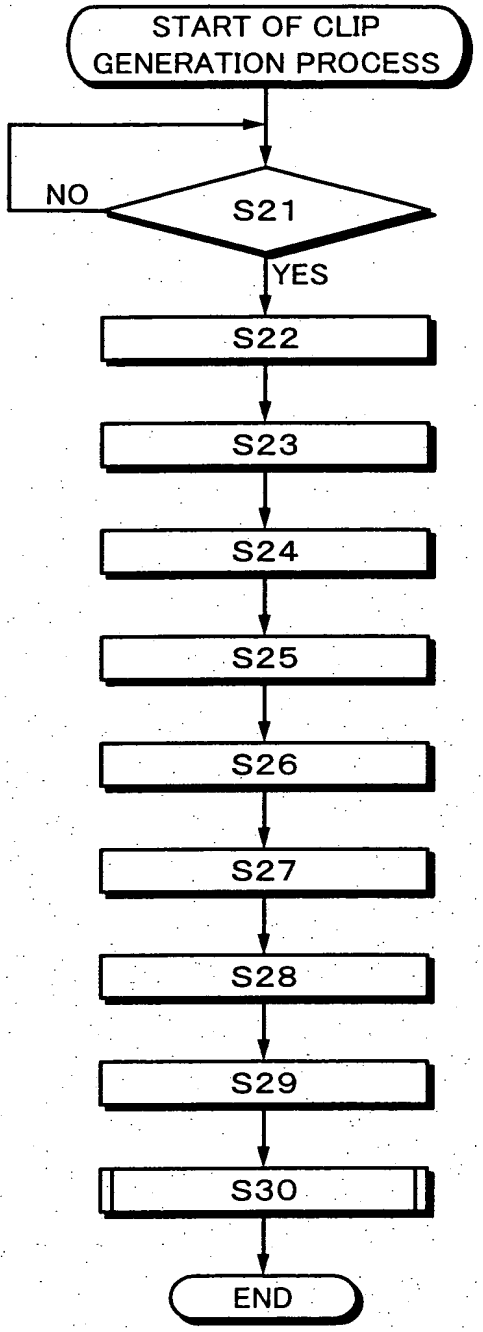

START OF CLIP GENERATION PROCESS
NO
S21
YES
S22
S23
S24
S25
S26
S27
S28
S29
S30
END

Fig. 18

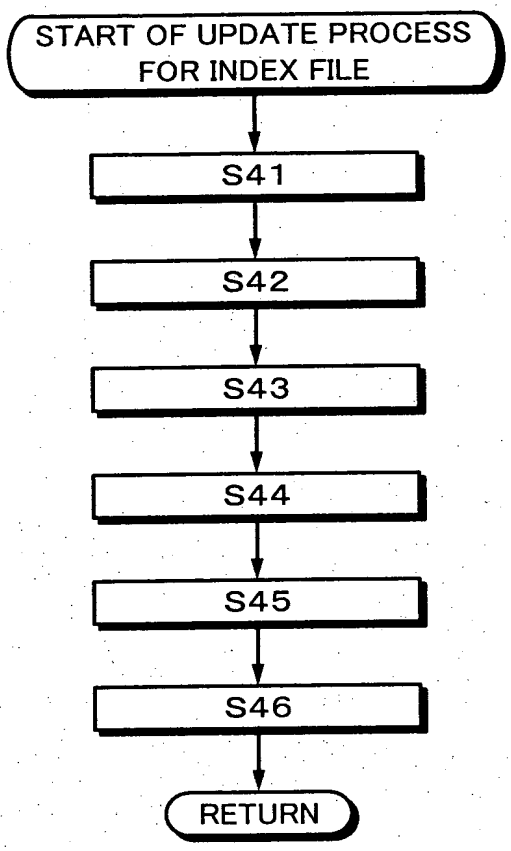

START OF UPDATE PROCESS FOR INDEX FILE
S41
S42
S43
S44
S45
S46
RETURN

Fig. 19

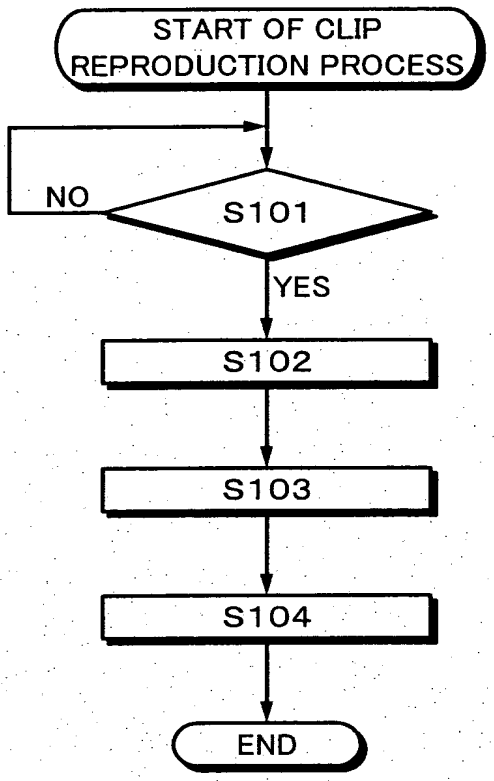

START OF CLIP REPRODUCTION PROCESS
NO
S101
YES
S102
S103
S104
END

Fig. 20

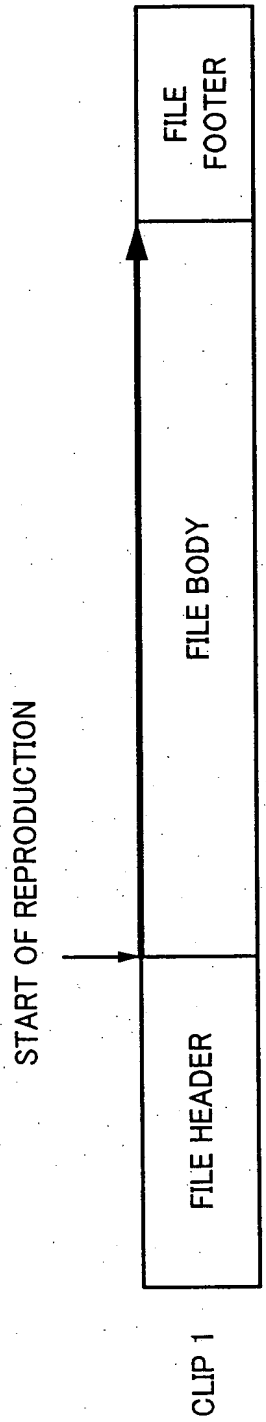

FILE FOOTER
FILE BODY
START OF REPRODUCTION
FILE HEADER
CLIP 1

Fig. 21

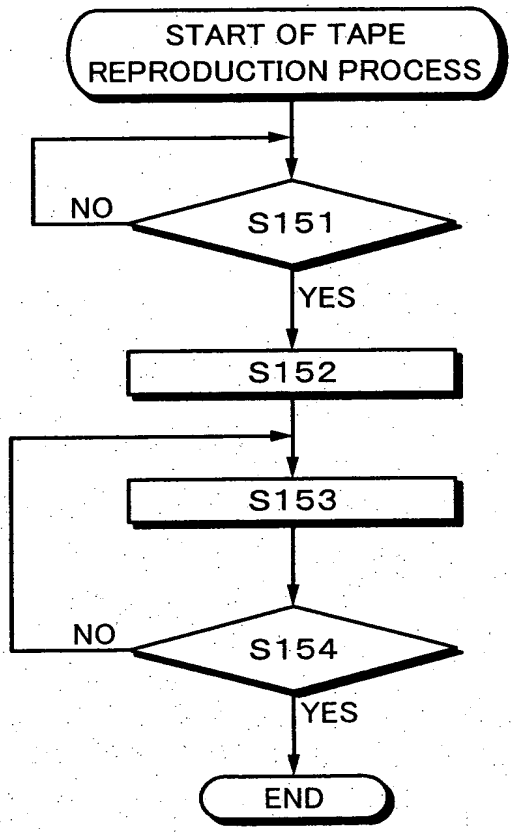
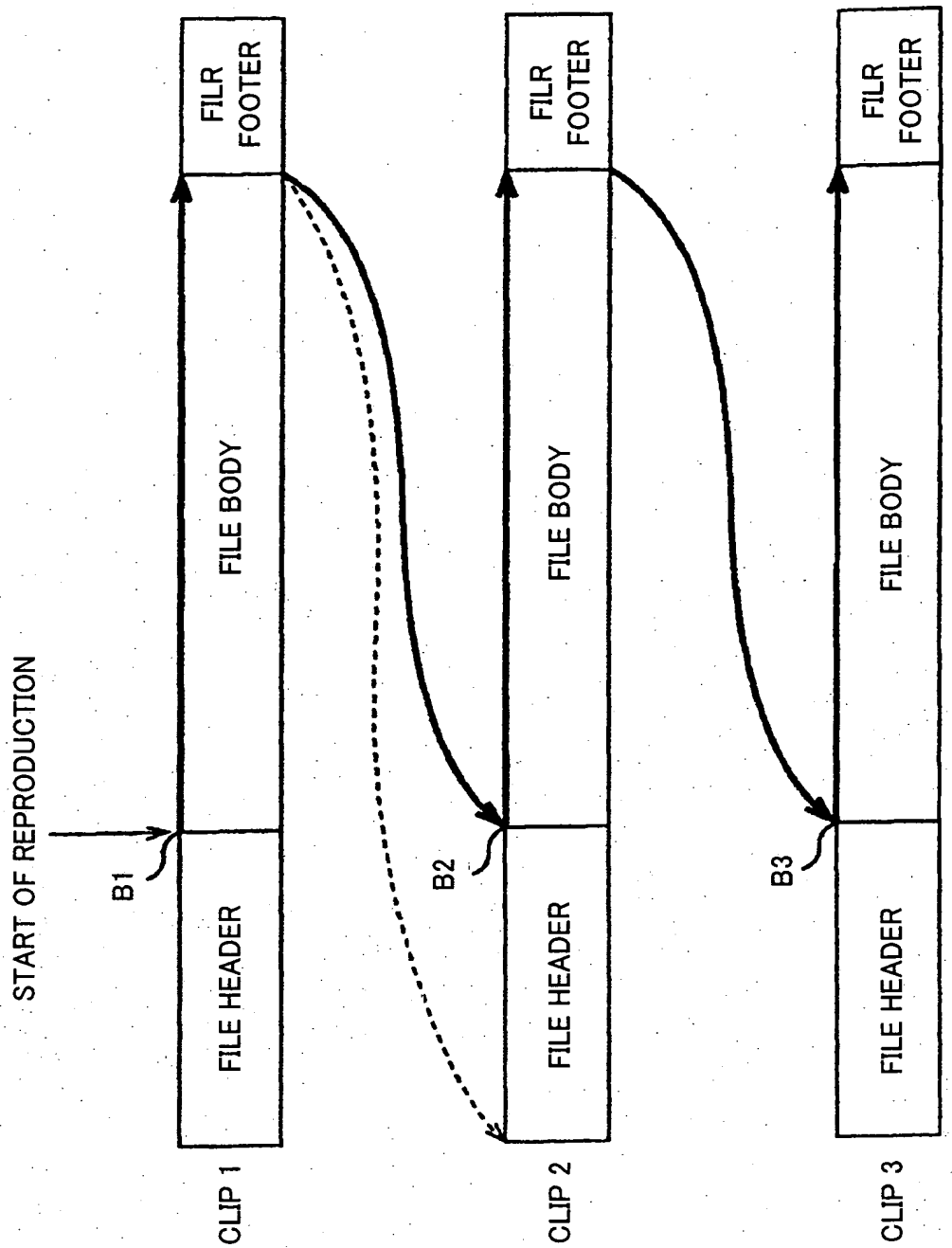

START OF TAPE REPRODUCTION PROCESS
NO
S151
YES
S152
S153
NO
S154
YES
END

Fig. 22


START OF REPRODUCTION
B1
B2
B3
FILE HEADER
FILE BODY
FILR FOOTER
CLIP 1
CLIP 2
CLIP 3

DESCRIPTION OF REFERENCE NUMERALS

1	VIDEO PROGRAM CREATION SUPPORT SYSTEM
11	PLANNING TERMINAL DEVICE
12	NETWORK
13	NEWS COLLECTION TERMINAL DEVICE
14	PHOTOGRAPHING DEVICE
15	FIELD PC
16	EDITING TERMINAL DEVICE
17	OPTICAL DISC
54	RECORD CONTROL SECTION
55	REPRODUCTION CONTROL SECTION
56	ENCODER/DECODER SECTION
66	DRIVE
101	DATA OBTAINMENT SECTION
102	INFORMATION OBTAINMENT SECTION
103	DATA GENERATION SECTION
104	CLIP GENERATION SECTION
105	INDEX FILE UPDATE SECTION
106	DATA RECORD SECTION
107	TABLE RECORD SECTION
111	CLIP REPRODUCTION SECTION
112	TAPE REPRODUCTION SECTION
113	INDEX FILE INFORMATION OBTAINMENT SECTION
114	CLIP INFORMATION OBTAINMENT SECTION
134	INDEX FILE

151 CLIP INFORMATION FILE

S1 HAS DISC BEEN LOADED ?

S2 READ INDEX FILE.

S21 HAS DATA RECORD START COMMAND BEEN ISSUED ?

S22 OBTAIN PARAMETER INFORMATION.

S23 GENERATE CLIP DIRECTORY.

S24 GENERATE EACH FILE OF ESSENCE DATA.

S25 GENERATE FRAME META DATA FILE.

S26 GENERATE CLIP META DATA FILE.

S27 GENERATE PICTURE POINTER FILE.

S28 OBTAIN HEADER SIZE OF ESSENCE DATA.

S29 GENERATE CLIP INFORMATION FILE ACCORDING TO HEADER SIZE AND PARAMETER INFORMATION.

S30 UPDATE PROCESS FOR INDEX FILE

S41 GENERATE CLIP ELEMENT DESCRIBING UMID AND FILE NAME OF CLIP.

S42 DESCRIBE ATTRIBUTE INFORMATION IN CLIP ELEMENT ACCORDING TO PARAMETER INFORMATION.

S43 GENERATE CLIP CHILD ELEMENT DESCRIBING UMID AND FILE NAME OF ESSENCE DATA OF CLIP.

S44 DESCRIBE ATTRIBUTE INFORMATION IN CLIP CHILD ELEMENT ACCORDING TO PARAMETER INFORMATION.

S45 DESCRIBE HEADER SIZE IN CLIP CHILD ELEMENT.

S46 ADD CLIP ELEMENT AND CLIP CHILD ELEMENT TO CLIP TABLE.

S101 HAS CLIP REPRODUCTION START COMMAND BEEN ISSUED ?

S102 READ DESIGNATED CLIP INFORMATION FILE.

S103 OBTAIN FILE NAME CORRESPONDING TO UMID OF ESSENCE DATA TO BE REPRODUCED FROM INDEX FILE.

S104 REPRODUCE ESSENCE DATA FROM POSITION OF WHICH HEADER SIZE IS REMOVED FROM ESSENCE DATA OF OBTAINED FILE NAME.

S151 HAS TAPE REPRODUCTION COMMAND BEEN ISSUED ?

S152 OBTAIN CLIP ELEMENT OF CLIP TABLE.

S153 REPRODUCE ESSENCE DATA FROM POSITION OF WHICH HEADER SIZE IS REMOVED FROM ESSENCE DATA OF CORRESPONDING CLIP ELEMENT.

S154 HAS PROCESS FOR ALL CLIPS BEEN COMPLETED ?